



# TORQ Analysis of Paper Goods Machine Setters, Operators, and Tenders to Team Assemblers




## INPUT SECTION:

Transfer	Title	O*NET	Filters		
From Title:	Paper Goods Machine Setters, Operators, and Tenders	51-9196.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Team Assemblers	51-2092.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

## OUTPUT SECTION:

Grand TORQ:













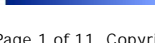


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Ability TORQ				Skills TORQ				Knowledge TORQ			
Level		90		Level		83		Level		90	
Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Oral Comprehension	51	7	62	No Skills Upgrade Required!				No Knowledge Upgrades Required!			
Oral Expression	48	6	59								
Written Expression	37	7	50								
Speech Clarity	41	7	50								
Speech Recognition	41	6	50								
Deductive Reasoning	41	4	50								
Problem Sensitivity	41	2	53								

LEVEL and IMPT (IMPORTANCE) refer to the Target Team Assemblers. GAP refers to level difference between Paper Goods Machine Setters, Operators, and Tenders and Team Assemblers.

## ASK ANALYSIS

### Ability Level Comparison - Abilities with importance scores over 50

Description	Paper Goods Machine Setters, Operators, and Tenders	Team Assemblers	Importance
Oral Comprehension	44 	51 	62 
Manual Dexterity	41 	41 	62 
Oral Expression	42 	48 	59 
Information Ordering	42 	42 	56 
Arm-Hand Steadiness	42 	39 	56 



Finger Dexterity	42	42	56
Near Vision	48	44	56
Problem Sensitivity	39	41	53
Control Precision	48	44	53
Written Expression	30	37	50
Deductive Reasoning	37	41	50
Speech Recognition	35	41	50
Speech Clarity	34	41	50
Skill Level Comparison - Abilities with importance scores over 69			
Description	Paper Goods Machine Setters, Operators, and Tenders	Team Assemblers	Importance
Knowledge Level Comparison - Knowledge with importance scores over 69			
Description	Paper Goods Machine Setters, Operators, and Tenders	Team Assemblers	Importance

Experience & Education Comparison							
Related Work Experience Comparison				Required Education Level Comparison			
Description		Paper Goods Machine Setters, Operators, and Tenders	Team Assemblers	Description		Paper Goods Machine Setters, Operators, and Tenders	Team Assemblers
10+ years		0%	0%	Doctoral		0%	0%
8-10 years		3%	0%	Professional Degree		0%	0%
6-8 years		0%	0%	Post-Masters Cert		0%	0%
4-6 years		0%	0%	Master's Degree		0%	0%
2-4 years		0%	4%	Post-Bachelor Cert		0%	0%
1-2 years		41%	6%	Bachelors		0%	0%
6-12 months		1%	10%	AA or Equiv		0%	0%
3-6 months		5%	2%	Some College		0%	1%
1-3 months		16%	6%	Post-Secondary Certificate		0%	11%
0-1 month		3%	17%	High School Diploma or GED		74%	63%
None		27%	50%	No HSD or GED		24%	22%
Paper Goods Machine Setters, Operators, and Tenders				Team Assemblers			
Most Common Educational/Training Requirement:							
Moderate-term on-the-job training				Moderate-term on-the-job training			
Job Zone Comparison							
2 - Job Zone Two: Some Preparation Needed				2 - Job Zone Two: Some Preparation Needed			
Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a teller might benefit from experience working directly with the public, but an inexperienced person could still learn to be a teller with little difficulty.				Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a teller might benefit from experience working directly with the public, but an inexperienced person could still learn to be a teller with little difficulty.			
These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.				These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.			



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## Tasks

### Paper Goods Machine Setters, Operators, and Tenders

#### Core Tasks

##### Generalized Work Activities:

- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Monitor Processes, Materials, or Surroundings - Monitoring and reviewing information from materials, events, or the environment, to detect or assess problems.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.

#### Specific Tasks

##### Occupation Specific Tasks:

- Adjust guide assemblies, forming bars, and folding mechanisms according to specifications, using hand tools.
- Cut products to specified dimensions, using hand or power cutters.
- Disassemble machines to maintain, repair, or replace broken or worn parts, using hand or power tools.
- Examine completed work to detect defects and verify conformance to work orders, and adjust machinery as necessary to correct production problems.
- Fill glue and paraffin reservoirs, and position rollers to dispense glue onto paperboard.
- Install attachments to machines for gluing, folding, printing, or cutting.
- Lift tote boxes of finished cartons, and dump cartons into feed hoppers.
- Load automatic stapling mechanisms.
- Measure, space, and set saw blades, cutters, and perforators, according to product specifications.
- Monitor finished cartons as they drop from forming machines into rotating hoppers and then into gravity feed chutes, in order to prevent jamming.

### Team Assemblers

#### Core Tasks

##### Generalized Work Activities:

- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Identifying Objects, Actions, and Events - Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.

#### Specific Tasks

##### Occupation Specific Tasks:

- Determine work assignments and procedures.
- Operate heavy equipment such as forklifts.
- Provide assistance in the production of wiring assemblies.
- Rotate through all the tasks required in a particular production process.
- Shovel and sweep work areas.

#### Detailed Tasks

##### Detailed Work Activities:

- confer with engineering, technical or manufacturing personnel
- direct and coordinate activities of workers or staff
- examine products or work to verify conformance to specifications
- fabricate, assemble, or disassemble manufactured products by hand
- perform safety inspections in manufacturing or industrial setting
- read work order, instructions, formulas, or processing charts



- Observe operation of various machines to detect and correct machine malfunctions such as improper forming, glue flow, or pasteboard tension.
- Place rolls of paper or cardboard on machine feedtracks, and thread paper through gluing, coating, and slitting rollers.
- Remove finished cores, and stack or place them on conveyors for transfer to other work areas.
- Stamp products with information such as dates, using hand stamps or automatic stamping devices.
- Start machines and move controls to regulate tension on pressure rolls, to synchronize speed of machine components, and to adjust temperatures of glue or paraffin.

#### Detailed Tasks

##### Detailed Work Activities:

- adjust production equipment/machinery setup
- examine products or work to verify conformance to specifications
- install equipment or attachments on machinery or related structures
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- maintain consistent production quality
- maintain or repair industrial or related equipment/machinery
- monitor production machinery/equipment operation to detect problems
- move or fit heavy objects
- operate pulp or paper making equipment
- read specifications
- read work order, instructions, formulas, or processing charts
- set up production equipment or machinery
- understand technical operating, service or repair manuals
- use hand or power tools
- use precision measuring tools or equipment

- use computers to enter, access or retrieve data
- use hand or power tools
- work as a team member

#### Tools - Examples

- Adjustable wrenches
- Bearing installation tools
- Bench vises
- Welding torches
- Dial calipers
- Metal chisels
- Dividers
- Burring tools
- Desktop computers
- Protective ear muffs
- Protective ear plugs
- Engine repair stands
- Fiber reinforced polymer FRP rollers
- Feeler gauges
- Hand files
- Torque angle meters
- Forklifts
- Arc welding equipment
- Dial indicators
- Vacuum bags
- Grinding machines
- Material guiding jigs
- Claw hammers
- Hand clamps
- Heat guns
- Pin protrusion gauges
- Allen wrenches
- Power hoists
- Ring squeezers



- Hydraulic press frames
- Power wrenches
- Heating furnaces
- Threaded insert tools
- Hand jacks
- Heat lamps
- Ladders
- Lathes
- Transits
- Locking pliers
- End milling machines
- Plastic mallets
- Metal inert gas MIG welders
- Electrochemical etching devices
- Micrometers
- Computerized numerical control CNC metal-cutting machines
- Milling machines
- Needlenose pliers
- Nut drivers
- Paint application brushes
- Paint application rollers
- High-volume low-pressure HVLP spray guns
- Curing ovens
- Assembly robots
- Rotating mandrels
- Tube cutters
- Flame cutters
- Pneumatic drills
- First assembly jigs
- Power chippers
- Cordless drills
- Bench grinders



- Edge planers
- Belt sanders
- Cutoff saws
- Power drivers
- Anti-vibration gloves
- Protractors
- Pry bars
- Gear pullers
- Center punches
- Ratchets
- Line reamers
- Chopper guns
- Respirators
- Snap ring pliers
- Alligator jaw compression riveters
- Steel rules
- Safety glasses
- Scaffolding
- Straight screwdrivers
- Scribes
- Adhesive application robots
- Beverly shears
- Socket wrenches
- Soldering guns
- Spanner wrenches
- Case wrenches
- Timing lights
- Layout squares
- Squeegees
- Bearing staking tools
- Measuring tapes
- Taps



- Drafting templates
- Tensiometers
- Fuel control wrenches
- Beading tools
- Crimping tools
- Lapping tools
- Tungsten inert gas TIG welding equipment
- Turnbuckles
- Radial drills
- Ultrasonic inspection equipment
- Trimming knives
- Vacuum pumps
- Wedges
- Tack welding equipment
- Welding hoods
- Welding robots
- Spot welding equipment
- Cable cutters
- Jib cranes
- Brakes

### Labor Market Comparison

Description	Paper Goods Machine Setters, Operators, and Tenders	Team Assemblers	Difference
Median Wage	\$ 38,230	\$ 23,730	\$( 14,500)
10th Percentile Wage	\$ 25,850	\$ 18,550	\$( 7,300)
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 45,200	\$ 28,380	\$( 16,820)
90th Percentile Wage	\$ 51,680	\$ 32,810	\$( 18,870)
Mean Wage	\$ 38,330	\$ 25,040	\$( 13,290)
Total Employment - 2007	910	3,850	2,940



Employment Base - 2006	951	3,958	3,007
Projected Employment - 2016	700	3,691	2,991
Projected Job Growth - 2006-2016	-26.4 %	-6.7 %	19.7 %
Projected Annual Openings - 2006-2016	23	82	59

## National Job Posting Trends

Trend for Paper Goods Machine Setters, Operators, and Tenders

Trend for  
Team  
Assemblers

### Job Trends from Indeed.com

— Paper Goods Machine Operator — Team Assembler

Data from [Indeed](http://Indeed.com)

## Recommended Programs

### Window Treatment Maker and Installer

Electromechanical Technology/Electromechanical Engineering Technology. A program that prepares individuals to apply basic engineering principles and technical skills in support of engineers engaged in developing and testing automated, servomechanical, and other electromechanical systems. Includes instruction in prototype testing, manufacturing and operational testing, systems analysis and maintenance procedures, and report preparation.

Institution	Address	City	URL
Central Maine Community College	1250 Turner St	Auburn	<a href="http://www.cmcc.edu">www.cmcc.edu</a>
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### Shoe, Boot and Leather Repairer

Machine Shop Technology/Assistant. A program that prepares individuals to apply technical knowledge and skills to fabricate and modify metal parts in support of other manufacturing, repair or design activities, or as an independent business.

No schools available for the program

### Sheet Metal Worker





Sheet Metal Technology/Sheetworking. A program that prepares individuals to apply technical knowledge and skills to form, shape, bend and fold extruded metals, including the creation of new products, using hand tools and machines such as cornice brakes, forming rolls, and squaring shears.

Institution	Address	City	URL
Northern Maine Community College	33 Edgemont Dr	Presque Isle	<a href="http://www.nmcc.edu">www.nmcc.edu</a>

### Maine Statewide Promotion Opportunities for Paper Goods Machine Setters, Operators, and Tenders

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings
51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	100	2	910	\$38,230.00	\$0.00	-26%	23
51-9121.00	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	84	2	850	\$38,860.00	\$630.00	-26%	19
51-4011.00	Computer-Controlled Machine Tool Operators, Metal and Plastic	82	2	720	\$40,490.00	\$2,260.00	6%	12
43-5053.00	Postal Service Mail Sorters, Processors, and Processing Machine Operators	81	2	970	\$41,950.00	\$3,720.00	-12%	10
51-9011.00	Chemical Equipment Operators and Tenders	81	2	0	\$38,790.00	\$560.00	-2%	5
51-4041.00	Machinists	78	3	1,860	\$41,560.00	\$3,330.00	4%	35
51-4192.00	Lay-Out Workers, Metal and Plastic	77	2	180	\$43,870.00	\$5,640.00	-24%	3
53-6051.07	Transportation Vehicle, Equipment and Systems Inspectors, Except Aviation	77	3	60	\$42,890.00	\$4,660.00	5%	2
49-2094.00	Electrical and Electronics Repairers, Commercial and Industrial Equipment	76	3	440	\$49,450.00	\$11,220.00	-19%	15
51-8013.00	Power Plant Operators	75	3	480	\$50,240.00	\$12,010.00	10%	21
49-9012.00	Control and Valve Installers and Repairers, Except Mechanical Door	74	3	170	\$47,860.00	\$9,630.00	-9%	3
51-4111.00	Tool and Die Makers	74	3	160	\$51,670.00	\$13,440.00	-11%	2



49-9096.00	Riggers	73	3	250	\$39,140.00	\$910.00	-12%	2
51-1011.00	First-Line Supervisors/Managers of Production and Operating Workers	73	3	3,750	\$45,510.00	\$7,280.00	-4%	65
47-2011.00	Boilermakers	72	4	60	\$39,260.00	\$1,030.00	12%	3

### Top Industries for Team Assemblers

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Employment services	561300	15.68%	199,847	252,932	26.56%
Motor vehicle parts manufacturing	336300	7.79%	99,321	80,278	-19.17%
Motor vehicle manufacturing	336100	4.50%	57,395	57,191	-0.35%
Other wood product manufacturing	321900	3.65%	46,477	43,797	-5.77%
Motor vehicle body and trailer manufacturing	336200	3.47%	44,237	44,350	0.25%
Plastics product manufacturing	326100	3.40%	43,379	45,983	6.00%
Architectural and structural metals manufacturing	332300	2.80%	35,620	38,043	6.80%
Medical equipment and supplies manufacturing	339100	2.66%	33,860	34,635	2.29%
Other fabricated metal product manufacturing	332900	2.47%	31,442	27,859	-11.39%
Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing	333400	2.41%	30,715	28,255	-8.01%
Other general purpose machinery manufacturing	333900	2.36%	30,035	27,113	-9.73%
Navigational, measuring, electromedical, and control instruments manufacturing	334500	1.84%	23,417	22,419	-4.26%
Agriculture, construction, and mining machinery manufacturing	333100	1.79%	22,809	21,297	-6.63%
Household appliance manufacturing	335200	1.65%	21,088	15,957	-24.33%
Semiconductor and other electronic component manufacturing	334400	1.65%	21,011	18,365	-12.59%

### Top Industries for Paper Goods Machine Setters, Operators, and Tenders

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Converted paper product manufacturing	322200	60.48%	68,412	57,411	-16.08%
Pulp, paper, and paperboard mills	322100	21.93%	24,800	17,202	-30.64%
Printing and related support activities	323100	8.22%	9,293	7,363	-20.77%
Newspaper publishers	511110	1.36%	1,536	1,316	-14.33%
Plastics product manufacturing	326100	1.27%	1,439	1,525	6.00%



Wholesale electronic markets and agents and brokers	425100	0.67%	762	865	13.48%
Employment services	561300	0.55%	618	783	26.56%
Animal slaughtering and processing	311600	0.46%	521	595	14.13%
Advertising and related services	541800	0.40%	448	505	12.83%
Paper and paper product merchant wholesalers	424100	0.39%	440	470	6.83%
Other general purpose machinery manufacturing	333900	0.19%	219	198	-9.73%
Miscellaneous durable goods merchant wholesalers	423900	0.09%	100	114	14.81%
Warehousing and storage	493100	0.07%	76	101	33.58%
Other electrical equipment and component manufacturing	335900	0.06%	69	64	-7.34%
Fruit and vegetable preserving and specialty food manufacturing	311400	0.05%	61	55	-9.33%